(I) CLAIMS

I claim:

1. A cellular composition, comprising cells isolated from a poorly differentiated uterine cancer.

2. A cellular composition as described in claim 1 hereinabove, wherein said cancer comprises endometrial cancer.

3. A cellular composition as described in claim 1 hereinabove, wherein said cancer comprises adenocarcinoma.

4. A cellular composition as described in claim 1 hereinabove, said cancer having characteristics consistent with a primary tumor.

5. A cellular composition as described in claim 1 hereinabove, wherein said cancer is metastatic.

6. A cell line as described in claim 1 hereinabove, wherein a plurality of said cells have at least 48 chromosomes.

7. A cell line as described in claim 1 hereinabove, wherein a plurality of said cells are at least triploid at chromosomes 3, 7 and 17, but only haploid at chromosome 14.

8. A cellular composition described in claim 1 hereinabove, wherein said cells are grown *in vitro* as a monolayer.

9. A human endometrial adenocarcinoma cell line described in claim 1 hereinabove, wherein a plurality of said cells have at least the following karyotypic characteristics: 48, XX, ?t (1:20) (p?34.3; p11.2), dup (2) (q11.1q23), +3, del (5) (q?23q?31), ?add(6) (p23), add (7) (p?21), +add (7) (q22), der(9;14) (q10;q10), add (15) (p11), +der (17) t(17,;19) (p11.1;p11.1), I (19) (q10), ?del (20) (p?11.2).

10. A line of cells originating from a specimen of human endometrial adenocarcinoma wherein a plurality of said cells behaves in substantially equivalent ways at the morphological, physiological or molecular levels as a cell of said sample.

11. A method of culturing cells *in vitro*, comprising the steps introducing said cells to media comprising a 1:1 mixture of Medium 199 and Ham's F12 supplemented with up to 4% serum, antibiotics, anti-micotics and growth factors; and culturing said cells under conditions for proliferation.

12. A method of culturing cells described in claim 11 hereinabove, comprising the steps of:

a. suspending cells, separated from a specimen cancer tissue, in a digestion media including (comprising) a mixture of collagenase A in a growth media comprising Medium 199 and Ham's F12 supplemented with fetal bovine serum, bovine calf serum , penicillin streptomycin, L-glutamine, fungizone and insulin transferrin selenium,

b. centrifuging said suspension until pellet formation,

c. introducing said pellet to a growth media including media comprising Medium 199 and Ham's F12 supplemented with fetal bovine serum, bovine calf serum , penicillin streptomycin, L-glutamine, fungizone and insulin transferrin selenium,

d. centrifuging said introductory solution, and

e. plating a supernatant onto a plating dish including culture media comprising Medium 199 and Ham's F12 supplemented with fetal bovine serum, bovine calf serum , penicillin streptomycin, L-glutamine, fungizone and insulin transferrin selenium.

13. A method of culturing a cell line described in claim 1 hereinabove, comprising the steps of:

a. obtaining a hysterectomy specimen of endometrial adenocarcinoma, and placing said specimen in media 1 including Leibovitz L-15 media, 5% penicillin/streptomycin, 500 μg/ml gentamicin and 2.5 μg/ml fungizone;

b. washing said specimen with Hank's Balanced Salt Solution ("HBSS");

c. mincing said specimen into 1 mm pieces, with sterile blades;

d. washing said pieces with HBSS;

e. centrifuging said pieces for 3 minutes at 700 rpm, until pellet formation;

f. exposing said pellet to 2 μg/ml of collagenase A in growth media 2 comprising a 1:1 mixture of Medium 199 and Ham's F12 supplemented with 1% fetal bovine serum, 3% bovine calf serum, 5% penicillin streptomycin, 4 mM L-glutamine, 2.5 μg/ml fungizone and 0.1% insulin transferrin selenium, for 1 hr at 37°C, pipetting vigorously every 15 minutes;

g. centrifuging at 700 rpm for 3 minutes, resulting formation of a pellet and a first supernatant;

h. plating said first supernatant onto at least one 60 mm plating dish including growth media 2;

i. re-exposing said pellet to said collegenase A in said growth media 2, for 1 hr at 37°C, pipetting vigorously every 15 minutes, resulting in formation of a second supernatant;

j. plating said second supernatant onto at least one 60 mm plating dish including growth media 2, for growth of a plurality of cells;

k. following approximately one month in said culture, and using a sterile pipette under sterile conditions, gently scraping a plurality of cells from said dish and re-plating said cells onto at least one 60 mm plating dish including growth media 2, for growth of a plurality of cells;

l. after approximately 1 week in said culture, transferring a plurality of cells to at least one 100 mm plating dish including growth media 2, and maintaining said cells in said media until cells become essentially confluent therein; and

m. approximately every 3 to 4 days, splitting the cells of said dish into fractions, then transferring each fraction of same into one of a plurality (approximately 4) of plating dishes including growth media 2, and maintaining said cells in said media until formation of additional cells, repeating as many times as desired.

14. A method of identifying a compound that inhibits the activity of a protein kinase in a cell, comprising the steps of:

a. providing a cell of claim 1 hereinabove,

b. contacting said cell with at least one inhibitor test compound, and

c. determining whether a protein kinase primarily localizes away from the cell membrane, said localization being an indication that said test compound likely inhibits said protein kinase.

15. A method described in claim 14 hereinabove, wherein:

a. said protein kinase is an isoform known to be involved in hindering the organization of cytoskeleton matrix in the cell cytoplasm, and

b. determining whether said isoform localizes primarily away from the cell membrane, said localization being an indication that said cell is apt to undergo organization of cytoskeleton matrix in the cell cytoplasm.

16. A method described in claim 15 hereinabove, wherein:

a. said protein kinase is PKC-α and said inhibitor test compound is retinoic acid, and

b. determining whether PKC-α localizes primarily in a cytoplasmic and perinuclear region, said localization being an indication that said cell is apt to undergo organization of cytoskeleton matrix in the cell cytoplasm.

17. A method of determining the effect of a protein kinase inhibitor on a condition in a cell having manifestations consistent with cancer, comprising the steps of:

a. providing a cell of claim 1 hereinabove,

b. contacting said cell with at least one inhibitor of protein kinase known to be present in abnormally high levels in cells failing to undergo organization of cytoskeleton matrix in the cell cytoplasm, and

c. determining whether protein kinase primarily localizes away from the cell membrane, said localization being an indication that said cell is apt to undergo organization of cytoskeleton matrix in the cell cytoplasm.

18. A method described in claim 17 hereinabove, wherein:

a. said protein kinase is PKC-α and said inhibitor of protein kinase is retinoic acid, and

b. determining whether PKC-α localizes primarily in a cytoplasmic and perinuclear region, said localization being an indication that said cell is apt to undergo organization of cytoskeleton matrix in the cell cytoplasm.

19. A method, using a cell isolated *in vitro,* for predicting the effect on cell differentiation

attributable to a differentiation enhancing test compound to be applied to an *in vivo* cancer cell, comprising the steps of:

a. providing a cell of claim 1 hereinabove,

b. contacting said cell with at least one enhancer test compound, and

c. determining whether actin filaments organize a cytoskeleton matrix, said organization being an indication that said test compound likely enhances cell differentiation.

20. A method as described in claim 19 hereinabove, wherein said enhancer test compound is retinoic acid.